Great Barrier Reef Marine Park Authority Annual Report 1979-80



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The Hon. R. J. Ellicott, Q.C., M.P., Minister for Home Affairs and Environment, Parliament House, Canberra, A.C.T. 2600

Dear Minister,

It gives me very great pleasure to submit to you, in accordance with the requirements of the *Great Barrier Reef Marine Park Act* 1975, the report of the Great Barrier Reef Marine Park Authority for the 1979/80 financial year. This report was prepared for the Minister for Science and the Environment but due to changes in Administrative Arrangements it is now submitted to you.

It has been a year of achievement. Cooperation between the Queensland and Commonwealth Governments has resulted in the declaration of the first section of the Great Barrier Reef Marine Park—the Capricornia Section. A zoning plan for that Section has been placed before Parliament and regulations are in an advanced stage of preparation. Work has proceeded on a proposal for a second section of the Marine Park off Cairns.

As part of the general increase in research in the Great Barrier Reef area, the Authority has carried out, or arranged, many studies relevant to the Marine Park in the social and physical sciences, often in association with other government or with private institutions or individuals.

Major programs to involve the public in the development of the Marine Park have been carried out by the Authority. The public has responded enthusiastically and many valuable facts and suggestions have been presented in submissions. These have been taken carefully into account in developing proposals for zoning plans or for declaring parts of the Marine Park.

Great assistance and co-operation has been given to the Authority by Queensland and Commonwealth Government instrumentalities and by private organisations.

The successful establishment and operation of the Marine Park will depend critically on the informed involvement of the public. The Authority has placed great emphasis on its public information activities during this year and will continue to do so.

Substantial increases in the Authority's staff have been approved and have occurred during the year. They have enabled the Authority to meet the greatly increased workload flowing from the declaration of the Capricornia Section and the decision of the Great Barrier Reef Ministerial Council that work should proceed on the proposed Cairns Section of the Marine Park.

Once again, the staff of the Authority have consistently worked much longer than normal hours, often without financial recompense. The Authority thanks them for their dedication and competence.

Yours sincerely,

GRAEME KELLEHER



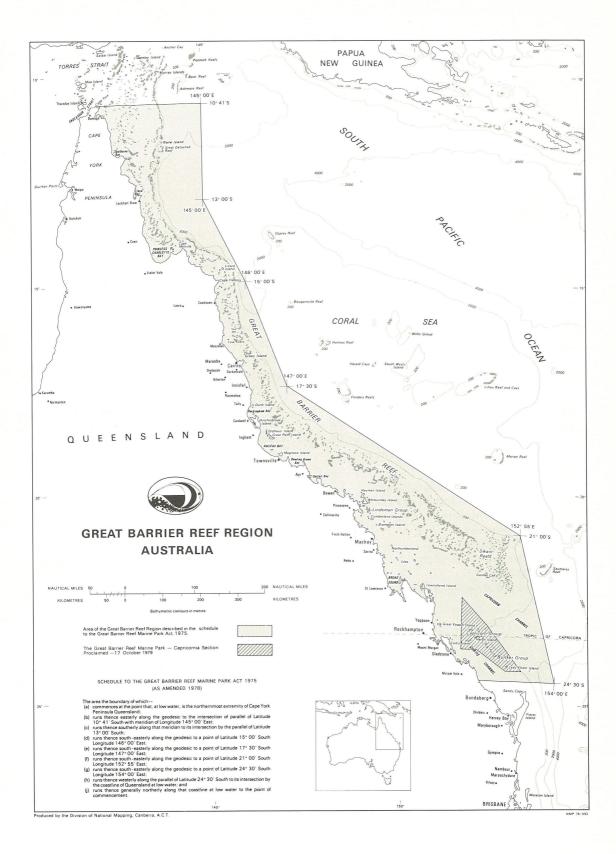
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1 THE YEAR

The year 1979/80 was marked by the introduction of the first formal measures to ensure the long term future of the Great Barrier Reef through conservation, while encouraging continuing enjoyment of its natural beauty.

Community concern for conserving the Reef was answered early in the year with the establishment of the Great Barrier Reef Marine Park—Capricornia Section, and preparations towards the end of the year for a possible second section.

The Capricornia Section was proclaimed in October 1979 covering 12,000 square kilometres of the marine environment in the heavily-used southern Reef region. It introduced to the Great Barrier Reef a concept of park administration under which the widest range of human usage is possible, consistent with the conservation of the natural qualities of the Reef.

These achievements by the Great Barrier Reef Marine Park Authority were a result of the co-operative procedures established at government level between the Commonwealth and Queensland and by the Authority's own program of consultation with other groups with an interest in the Reef Region, particularly those in Queensland.

Policy Co-ordination

The establishment of the policies of the two Governments was made at a meeting between the Prime Minister and the Premier of Queensland on 14 June 1979. At the meeting they affirmed that the basic policy intention of both governments was to ensure that the Great Barrier Reef area be recognised and preserved as an important feature of Queensland's and Australia's heritage. The Prime Minister and the Premier noted that no provision had previously been made for both Governments to co-ordinate policy at the ministerial level. They announced the establishment of the Great Barrier Reef Ministerial Council, comprising

Commonwealth and State Ministers particularly representing marine park, conservation, science and tourism.

In relation to the territorial sea, the Premier and the Prime Minister agreed that the arrangements with Queensland which will flow from the agreements of the June 1978 Premiers' Conference will be on the same basis as arrangements to be entered into in respect of other States, but with full regard to the *Great Barrier Reef Marine Park Act* and to the Prime Minister's Parliamentary Statement of 4 June 1979 on Petroleum Exploration in the Great Barrier Reef.

Further, the agreement provided that the program of short and longer-term research into the Great Barrier Reef eco-system announced by the Prime Minister on 4 June would be monitored by the Ministerial Council and closely supervised by the Authority.

Research Funding

Increased funding for Great Barrier Reef scientific research occurred during 1979/80 including grants totalling approximately \$300,000 recommended to the Minister for Science and the Environment, the Hon. David Thomson MC by the Funding Advisory Panel of the Australian Marine Sciences and **Technologies Advisory Committee** (AMSTAC-FAP). This amount was additional to the research funding of the Authority, the Australian Institute of Marine Science (AIMS) and other research institutions. To co-ordinate research effort and avoid duplication, the Authority consulted with these organisations and institutions. Authority Members, Dr Joe Baker and Mr Syd Schubert, are also members of AMSTAC.

The Authority's own research included studies connected with the development of the Capricornia Section and the proposed Cairns Section; Reef Region analyses; investigations into recreational fishing and coral trout populations; coral baseline surveys and tourism data collection.

The research and investigation programs of the Authority involve gathering the views and comments of expert groups such as the Great Barrier Reef Consultative Committee and the Great Barrier Reef Committee, Reef user organisations and individuals, and the general public.

In order to maximise public involvement in Marine Park development, the Authority with the endorsement of the Ministerial Council increased opportunities for public participation in connection with the Capricornia Section beyond the statutory requirements.

Visits and Appointments

The Prime Minister, the Rt. Hon. Malcolm Fraser continued his personal interest in Reef matters during the year and held informal discussions with the Authority and senior staff during a visit to Townsville in September.

On 6 December, the Hon. David Thomson MC was appointed Minister for Science and the Environment, with responsibilities for the Great Barrier Reef Marine Park and the Authority. He replaced Senator the Hon. J. J. Webster. Both Ministers visited

the Authority headquarters in Townsville during the year. The Queensland Minister for Maritime Services and Tourism the Hon. Max Hooper visited the Authority with Mr Thomson for discussions involving officials connected with the Queensland tourist industry.

The Authority in 1979/80 obtained Public Service Board approval to increase permanent staff positions to 31 to meet the commitments associated with declaration and zoning. It is intended that the policy of maintaining a comparatively small, specialised staff will continue, with external facilities and manpower, particularly in the private sector, engaged when required.

On 21 December, Mr Graeme Kelleher, a senior Commonwealth officer with extensive experience in environmental resource management was appointed the first Chairman of the Authority, for a term of five years, after a period of almost six months as full-time Acting Chairman.

The Great Barrier Reef Consultative Committee, established by the Act with an advisory role in the Marine Park development, was reconstituted in October with 15 members under the chairmanship of Professor K. P. Stark of the James Cook University of North Queensland.



Members of the Great Barrier Reef Marine Park Authority (I. to r.) Mr Syd. Schubert, Mr Graeme Kelleher (Chairman), Dr Joe Baker.

Highlights

The major event of the year was the declaration of the Great Barrier Reef Marine Park—Capricornia Section followed by the preparation of a zoning plan. The significant dates associated with these processes were:

1979	
4 October	 Inaugural meeting of the Great Barrier Reef Ministerial Council examined the Authority's report on the proposed boundaries of the Capricornia Section and agreed to recommend that action to enable proclamation should proceed immediately.
17 October	 The Governor-General signed the proclamation for the Capricornia Section.
21 October	 Details were published in a Special Commonwealth Gazette.
24 October	 The Authority placed advertisements in newspapers throughout Australia, giving notice of the intent to prepare a zoning plan for the Capricornia Section, and calling for public representations.
27 October	 The advertisements were repeated.
5 December	 Closing date for public representations on intent to zone.
1980 28 March	 Second meeting of the Great Barrier Reef Ministerial Council endorsed the release of the zoning plan to permit a public review process

to be set in train.

- The Authority advertised the release of the zoning plan in Queensland coastal and national daily newspapers and announced a period of approximately eight weeks for public representations. A public participation program involving the establishment of 16 display and information centres for the zoning plan throughout the Commonwealth began immediately. Further advertisements drew attention to the location of these centres.

6 June – Public representations closed in relation to the zoning plan.

Other Events

- On 24 July, a voluntary survey of amateur fishing activities commenced at boat ramps on the Capricornia Coast between Yeppoon and Bundaberg, continuing until 12 August.
- On 31 August, a workshop on coral reef monitoring was held at the Australian Institute of Marine Science attended by Australian and overseas marine scientists.
- A workshop was held at Heron Island from 25 October to 1 November to develop techniques for surveying coral trout populations.
- On 15 December, Authority staff investigated reports of an infestation of crown of thorns starfish at the Green Island reefs. The Minister for Science and the Environment, the Hon. David Thomson, MC, on 18 December announced his approval for expenditure to develop ongoing studies of the crown of thorns with a view to developing a practical program to combat the starfish.

9 April

- The Chairman of the Authority, Mr Kelleher, on 17 February, 1980 announced plans to involve the public in the development of the Great Barrier Reef Marine Park, under a community participation program.
- On 13 March the Authority began an extensive survey lasting ten weeks on reefs between Innisfail and Lizard Island determining reef and coral conditions and monitoring the presence of crown of thorns starfish.
- On 28 March, the Great Barrier Reef Ministerial Council discussed the possibility of proposing additional areas of the Great Barrier Reef Region for consideration as further sections of the Marine Park. They agreed that the Authority should continue with work in relation to a proposed section off Cairns.
- On 17 May, a period of public comment relating to the possible Cairns Section commenced with displays and meetings organised by the Authority in Tully, Innisfail, Cairns, Cooktown, Mossman, Port Douglas and Brisbane.
- On 11 June, a contract for the development of curriculum materials on the Great Barrier Reef for use in schools was signed as a joint project of the Authority and the Townsville College of Advanced Education.
- The Second World Wilderness Congress was held in Cairns between 9 and 14 June. The Authority Chairman, Mr Kelleher, delivered a paper, and staff conducted a workshop for delegates in relation to the Great Barrier Reef.

2 MINISTERIAL COUNCIL

The Great Barrier Reef Ministerial Council consists of two Ministers from each of the Commonwealth and Queensland Governments and was established as a result of the agreement between the Prime Minister and Premier of Queensland of 14 June 1979.

At its inaugural meeting on 4 October, the Council received the Authority's proposal for declaration of the Great Barrier Reef Marine Park—Capricornia Section and agreed to recommend that action to enable proclamation should proceed immediately.

The Ministerial Council also agreed that the present scope of co-operation between Queensland and Commonwealth officials on issues relevant to the Reef should be maintained and expanded.

The Council decided that:

- the Great Barrier Reef Marine Park Authority will undertake its functions with the maximum practicable use of Queensland Government and private sector services commensurate with efficient operation;
- the Authority should develop a strong corporate identity in keeping with both Commonwealth and Queensland commitments to protect the Great Barrier Reef;

- the Authority will pay particular attention to its planning and research functions as required to achieve the establishment, control, care and development of a viable Marine Park (in particular in order to declare and zone further sections of the Great Barrier Reef Marine Park); and
- the Authority will co-ordinate the provision of advice on research relevant to the Great Barrier Reef to the Great Barrier Reef Ministerial Council.

At its second meeting on 28 March 1980, the Ministerial Council endorsed the release of the zoning plan prepared by the Authority for the Capricornia Section to permit a public review process to occur. The Council also agreed that the Authority should continue with work in relation to a proposed section of the Marine Park off Cairns.

It was further agreed that the formulation of policy matters relating to Marine Parks and the development of zoning plans and regulations would be approved by the Council. Further, the Council would be the point of appeal and approval on implementation of zoning plans, and major issues which may arise as a result of such implementation.

The Authority provides secretarial and administrative support to the Ministerial Council.

3 THE AUTHORITY

Established under the *Great Barrier Reef Marine Park Act* 1975, the Authority is a Commonwealth statutory body consisting of a full-time Chairman and two part-time Members, one of whom is nominated by the Queensland Government.

The major functions of the Authority as defined in *Section 7* of the Act are:

- (a) to make recommendations to the Minister in relation to care and development of the Marine Park including recommendations, from time to time, as to—
 - (i) the areas that should be declared to be parts of the Marine Park; and
 - (ii) the regulations that should be made under this Act;
- (b) to carry out, by itself or in cooperation with other institutions and persons, and to arrange for any other institutions or persons to carry out, research and investigation relevant to the Marine Park;
- (c) to prepare zoning plans for the Marine Park.

The Authority commenced operations in 1976 and since the agreement between the Prime Minister and Queensland Premier concerning constitutional and jurisdictional issues on 14 June 1979, has been able to pursue its responsibilities and functions in co-operation with Queensland State and local authorities and

the public.

Activities in connection with the major functions—park declaration; zoning and management; and research are detailed in Chapters 4, 5 and 6.

Current Membership

Mr Graeme Kelleher was appointed the first Chairman of the Authority on 21 December after approximately six months as full-time Acting Chairman following the retirement of the previous Acting Chairman, Mr Horrie Higgs. Mr Kelleher is a senior Commonwealth officer with wide experience in the development and implementation of a variety of resource management and environmental policies, including those related to water and soil resources, environmental management, and nuclear safeguards. He was one of the three Commissioners of the Ranger Uranium Environmental Inquiry.

His appointment to the Authority is for five years.

The two part-time members of the Authority are Dr Joe Baker and Mr Syd Schubert. Dr Baker was appointed for a second three-year term on 4 July 1979. He is Director of the Roche Research Institute of Marine Pharmacology in Sydney and prior to this appointment in 1974 was Associate Professor of Chemistry, James Cook University of North Queensland.

Mr Schubert is Co-ordinator General for Queensland and was nominated by the Queensland Government. He has had extensive experience and responsibilities in resource management at the most senior levels of policy development and implementation. Mr Schubert's current three-year term expires on 30 June 1981.

Authority Meetings

During the year of 1979/80, the Authority held the following meetings:

- 1979 10 July Townsville
 1-2 August Townsville
 5-6 September Townsville
 9 October Brisbane
 13 November Townsville
 17-18 December Townsville
 1080 21 January Townsville
- 1980 21 January Townsville 20-21 February - Canberra 14 March - Townsville 19 May - Townsville

Significant Issues

During 1979/80, the future of the Great Barrier Reef continued to be a topic of wide public discussion.

Oil Drilling

Before the year began, both the Prime Minister and Queensland Premier confirmed in their statement of 14 June 1979, that it was the policies of their respective Governments to prohibit any drilling on the Reef or any drilling or mining which could damage the Reef.

Earlier, on 4 June, the Prime Minister announced that the Commonwealth Government had decided that in line with the recommendation of the Chairman of the Royal Commissions into exploratory and production drilling for petroleum in the area of the Great Barrier Reef, there should be no further exploration for petroleum in the Great Barrier Reef Region and that there should be no renewal of petroleum exploration permits in the Region until the results of both short and longer-term research were known.

The Great Barrier Reef Marine Park Act (Section 38) states that no operations for the recovery of minerals shall be carried on in the Marine Park except with the approval of the Authority for the purpose of research and investigation relevant to the establishment, care and development of the Marine Park or for scientific research.

Coastal Management

In a submission to the House of Representatives Standing Committee on Environment and Conservation—Inquiry into Coastal Zone Management, the Authority expressed the view that because the coastal zone of Queensland and the Great Barrier Reef are ecologically connected, close liaison between differing administrative bodies and private industry in the development of these areas was essential.

Shipping and Oil Spillage

The Authority has in previous reports expressed concern at the potential threat from oil spillage and other pollution generated by commercial shipping in Great Barrier Reef waters. It has reaffirmed its support for compulsory pilotage for all ships over 10,000 tonnes in areas of the Region. The Authority believes that the national contingency plan in the event of an oil spill, known as the 'National Plan to Combat Pollution of the Sea by Oil' should be extended in the Region to include pollution by hazardous substances.

Each State has a Committee to effect local contingency plans in the event of an oil spill and the Authority is an advisor to the Queensland State Committee.

During the year, the Authority proposed a major workshop on the potential threats of oil and other spillage, which is planned for early 1981.

The opportunity was taken during a visit to Australia by an American expert, Dr Timothy Kana of the US Research Planning Institute, to hold discussions on oil spill contingency and oil spill follow-up research. The discussions included members of Commonwealth and State Committees of the National Plan.

In addition, an Authority officer took part in a course conducted by the Commonwealth Department of Transport on Oil Spills—Their Control and Cleanup in Harbours. Port authorities and representatives of oil companies also attended.

Authority member, Dr Baker is convenor of an AMSTAC working group on oil spills, and the Executive Officer, Dr Alistair Gilmour, was a member of the Maritime Service Advisory Committee—National Plan.

Special Zones

The Great Barrier Reef Marine Park Act allows for the establishment of Special Zones within a Marine Park. These Zones may be administered under the National Parks and Wildlife Conservation Act through the Director of the Australian National Parks and Wildlife Service, and regulated as if they were a national park or reserve.

Following the declaration of the Capricornia Section, the Authority reaffirmed a previous decision that such Zones would not be recommended until the Authority was satisfied that it had sufficient information on the ecology of the area and management implications to justify the excision of such Zones from Authority control.

Long-Line Fishing

At its January meeting, the Authority agreed that the introduction of intensive forms of fishing such as long-lining in the Great Barrier Reef Region was not appropriate without prior assessment of the likely impacts on fish stocks or the general Reef ecology. Also, long-lining presented the possibility of an adverse effect on gamefishing activities in the Region, and any substantial expansion of fisheries within the Great Barrier Reef Region should not take place without prior assessment of the impact of such fisheries.

On 5 June 1980, the Commonwealth Minister for Primary Industry, the Hon. Peter Nixon, announced that an agreement with Japan allowing long-line fishing in an area 140 miles out to sea north of Townsville would expire on 31 October, and the area closed to long-line fishing in North Queensland waters was being extended.

Island Research Stations

The operations of island research stations in the Great Barrier Reef Region were examined at the Authority's October meeting. Direct Authority involvement in the management of these research stations was not considered to be desirable. However, recognising their importance to research in the Region, the Authority decided to encourage the stations in developing common policies and coordinated programs.



The Prime Minister, the Rt. Hon. Malcolm Fraser held informal talks with Authority members and staff when he visited the Townsville headquarters in September.

4 PARK DECLARATION

The Great Barrier Reef Marine Park— Capricornia Section, was declared on 17 October 1979. It covers approximately 12,000 square kilometres of the most southern area of the Great Barrier Reef Region around the heavily-used reefs of the Capricorn and Bunker Groups.

The boundaries as proclaimed were recommended by the Authority after considerable research and investigation into the historical, biological and physical features of the area. Views and opinions were sought from the Great Barrier Reef Consultative Committee, the Great Barrier Committee, other expert groups, consultants and individual users.

The Section boundaries include the seabed to a depth of 1,000 metres and the airspace to a height of 915 metres. However, this does not imply that restrictions will be placed on airspace. Excluded from the Section are all islands that are part of Queensland and are not owned by the Commonwealth.

The Capricornia Section was chosen mainly because of its accessibility to a large number of visitors. The adjacent coastal centres, particularly Gladstone, are experiencing considerable expansion and tourist and local use has increased significantly and is likely to continue.

Administrative Procedures

The steps to achieve proclamation were undertaken through the cooperative and consultative machinery between the Commonwealth and Queensland established by the Great Barrier Reef Ministerial Council.

The Council agreed to recommend that action to enable proclamation of the Capricornia Section as the first stage of the Great Barrier Reef Marine Park should proceed immediately.

The Ministers also agreed to the Authority developing a zoning plan for the Capricornia Section.

The Governor-General proclaimed the boundaries of the Section on 17 October,

and the Authority later called for public representations on its intent to prepare a zoning plan.

Public meetings were held by the Authority in Gladstone and Bundaberg to assist individuals and groups interested in making submissions. More than 150 people attended.

By the advertised closing date of 5 December the Authority had received 90 representations which covered a wide range of topics and attitudes connected with the proposed zoning plan.

Possible Second Section

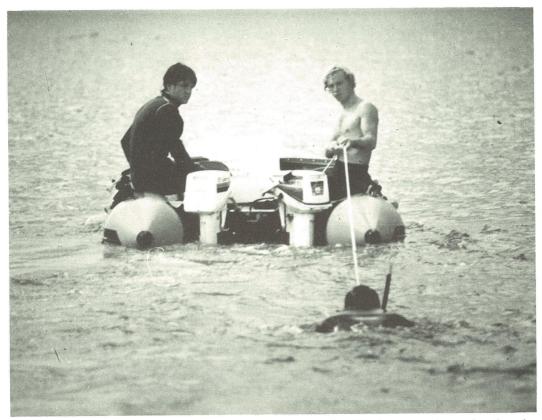
The Great Barrier Reef Ministerial Council at its March meeting agreed that the Authority should continue with work in relation to a proposed section of Marine Park off Cairns. The Council further decided to seek additional public comment on matters relating to that section.

The Authority had already begun gathering biological, physical and economic information on an area between Cook's Passage in the north and just south of Dunk Island, which is heavily used for commercial and recreational purposes and includes the major tourist resort at Green Island.

On 17 May, the Authority placed advertisements throughout Australia seeking further information on the area from current users and other interested people and inviting comment on possible declaration.

Public Response

The Authority initiated a display and information program with officers visiting Brisbane, Tully, Innisfail, Cairns, Cooktown, Mossman and Port Douglas to gather public comment. Discussions were held with individuals and groups at each location, and maps of the area under review were distributed. Within a month the Authority had received 26 written submissions and approximately 80 verbal submissions on the proposal. All comments raised the need for some form of marine park or Reef resource management in the area. Comments were being examined at the end of the year.



Authority staff, using the manta-board tow technique, surveyed reefs within the proposed second section of the Marine Park between Lizard and Dunk Islands.

5 ZONING AND MANAGEMENT

The Great Barrier Reef Marine Park Act (Section 32) requires that as soon as practicable after an area has been declared to be part of the Marine Park, the Authority shall prepare a zoning plan in respect of that area.

For the Capricornia Section, the zoning plan was released for public comment on 9 April 1980.

The plan provides a basis for the management and regulation of usage within the Section and defines the range of activities permitted within each zone so they are compatible with each other and with the need to conserve the natural qualities of the Great Barrier Reef.

The concept of the Great Barrier Reef Marine Park differs from most terrestrial national parks in that there is provision for all reasonable commercial and recreational activities other than operations for the recovery of minerals. The management objectives provide opportunities for the use and enjoyment of the Park to an extent consistent with the conservation of the natural qualities of the area.

A zoning plan is prepared in accordance with the provisions of the *Great Barrier Marine Park Act* 1975, which states:

'In the preparation of the plan, regard shall be had to the following objects:

- (a) the conservation of the Great Barrier Reef;
- (b) the regulation of the use of the Marine Park so as to protect the Great Barrier Reef while allowing the reasonable use of the Great Barrier Reef Region;
- (c) the regulation of activities that exploit the resources of the Great Barrier Reef Region so as to minimise the effect of those activities on the Great Barrier Reef;
- (d) the reservation of some areas of the Great Barrier Reef for its appreciation and enjoyment by the public; and

(e) the preservation of some areas of the Great Barrier Reef in its natural state undisturbed by man except for the purposes of scientific research.'

Zones and Areas

The concept of marine park protection was not new to the Capricornia area, as the Heron-Wistari Reefs Marine Park has existed under Queensland legislation for several years.

Under the Authority's draft plan, the Section was divided into the following zones:

General Use 'A' Zone General Use 'B' Zone Marine National Park Zone Scientific Research Zone Preservation Zone

Within certain zones, areas of restricted activity were proposed for management and conservation purposes as described in the zoning plan.

These were:

Replenishment Areas which are closed from time to time to fishing and collecting for a specified period to allow for the recovery of fish and any other resource stocks.

Seasonal Closure Areas where all activities are restricted on a seasonal basis to protect from human intrusion important bird and turtle nesting sites.

Reef Appreciation Areas which are small areas provided on reefs subject to heavy usage. Fishing and collecting are not allowed, so that the public can observe and appreciate relatively undisturbed marine life.

Reef Walking Areas which are small areas subject to heavy usage in which educational reef walking trails are established.

The Zones and Areas were reviewed and some changes were made following the receipt of public comment.



In Cairns, the Minister for Science and the Environment, the Hon. David Thomson MC, officially launched the public participation program following the release of the draft zoning plan for the Capricornia Section.

Public Participation

The Great Barrier Reef Marine Park Act provides for two stages of public participation in the development of a zoning plan for a Marine Park section.

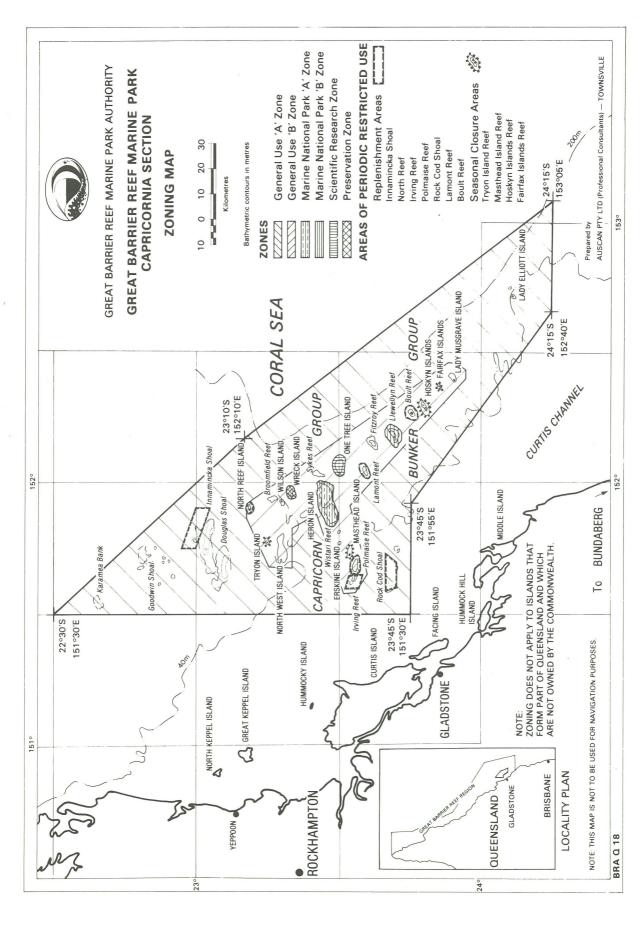
The first occurs as soon as practicable after declaration when the Authority is required under the Act to announce its intention to zone, and invite representations in connection with the preparation of the zoning plan. The second stage of public comment is required after the release of the draft zoning plan.

Zoning Plan Display

When the zoning plan for the Capricornia Section was released on 9 April, the Authority immediately launched a comprehensive public information and participation program to obtain maximum community input. Because of the large number of activities in the Capricornia Section, the Authority doubled the statutory period of one month allowed for public representations under the Act to just over eight weeks, closing on 6 June.

An explanatory document 'Understanding the Zoning Plan' was produced and was distributed with the zoning plan widely throughout the community.

With the assistance of members of the Australian Travel Industry Association and the Queensland Tourist and Travel Corporation, the Authority established information and display centres for the zoning plan throughout the Commonwealth.



There were 16 separate centres, most of which were manned by Authority officers at stages during the public participation period. All capital cities and major Queensland coastal centres were included. In Canberra a special display was mounted at a major shopping centre; in Sydney the windows of the OTC building in Martin Plaza were used. The Minister for Science and the Environment, the Hon. David Thomson MC opened the Cairns and Canberra displays, and the Queensland Minister for Maritime Services and Tourism, the Hon. Max Hooper opened the Brisbane display.

Advertisements appeared in major newspapers throughout Australia and Queensland coastal centres on 9 and 12 April advising of the release of the zoning plan and calling for public submissions. Further advertisements directed people to the special display centres, and dates of operation. Several hundred people visited the display centres, and when the period for representations closed on 6 June, the Authority had received 88 separate submissions, 76% of which came from Queensland.

Further Action

At the end of the year, officers of the Authority were studying the public comments and representations to determine what changes might be made to the original zoning plan, prior to its examination by the Great Barrier Reef Ministerial Council.

Upon finalisation, the Authority is required to submit the plan to the Minister for Science and the Environment, with copies of public representations, and stating what action has been taken on them.

If it is not referred back to the Authority for further consideration, the Minister places it before both Houses of the Commonwealth Parliament. If no disallowance motion is passed in either House within 20 sitting days, the Minister advises by public notice when the plan comes into force.

Park Management

The responsibilities of effectively managing the Great Barrier Reef Marine Park are complex, because of the areas and distances involved.

The zoning plan provides a basis for management, but the observance of zones and adherence to controls over such matters as rubbish disposal will depend largely on voluntary public co-operation.

In the Capricornia Section, the intention was to produce a zoning plan allowing management with a minimum of regulations and the least possible interference to established human activities, while ensuring that the natural qualities of the Reef were conserved.

Under the draft zoning plan, 78% of the Section continued to be available for use without significant restriction.

It is not proposed to introduce a new regulating agency to enforce the provisions of a zoning plan and accompanying regulations. The agreement between the Prime Minister and the Queensland Premier provides that the dayto-day management should be undertaken by officers of existing Queensland agencies who in discharging these responsibilities will be subject to the Great Barrier Reef Marine Park Authority.

Complementary Management

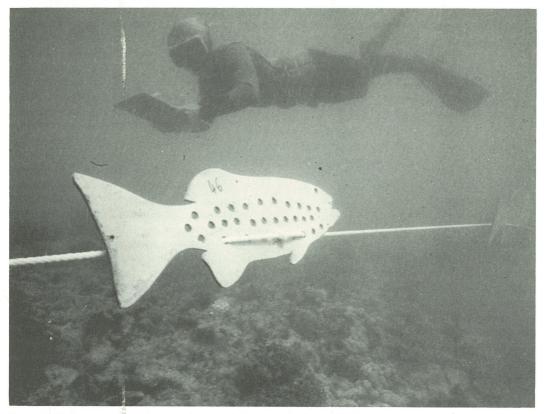
While Marine Park provisions may be applied to reefs, shoals, the seabed and airspace within park boundaries, they do not include islands that are part of Queensland and are not owned by the Commonwealth. Many of these islands are already national parks under Queensland legislation.

The Ministerial Council decided that Commonwealth and Queensland officials should examine the possibility of complementary management regimes in areas of the state adjacent to, or likely to affect the Great Barrier Reef Marine Park. This examination is to cover:

- (i) the proclamation of terrestrial national parks and marine parks under Queensland legislation;
- (ii) the suitability of legislation, both Commonwealth and Queensland, for establishing a uniform management approach, particularly with reference to the difficulties of law enforcement at the interface between the two jurisdictions; and
- (iii) consultative mechanisms in the development of proposals.

It is recognised that as the Capricornia Section is one of the most heavily-used areas of the Great Barrier Reef, significant provision of staffing and other resources will be required for its effective management.

An important element will be the inclusion of additional educational and information services to enhance visitor understanding and enjoyment. Considerable benefits are expected to flow to Queensland and Australia from the increased tourism activity expected as a result.



As part of a program to assess coral trout populations, Authority staff refined the technique of estimating fish sizes underwater by using wooden replicas.

PARK USAGE

Within the Great Barrier Reef Marine Park, activities are regulated by a zoning plan. This plan makes provision for all reasonable recreational, scientific and commercial usage (with the exception of operations for the recovery of minerals), providing such usage is compatible with conserving the natural qualities of the Great Barrier Reef.

6 RESEARCH AND INVESTIGATION

The Authority's research role is principally to secure information needed for marine park planning and management. However, it has been also given the responsibility to supervise and report to the Ministerial Council on the program of short and longer term research into the Great Barrier Reef eco-system announced in the Prime Minister's Parliamentary statement of 4 June 1979.

The Authority's own program includes the research and monitoring, either 'inhouse' or by contract, of reef usage and conditions, as well as socio-economic and resource studies. In order to minimise duplication and maximise the use of facilities, the Authority has developed close relationships with the Australian Marine Sciences and Technologies Advisory Committee (AMSTAC), the Australian Institute of Marine Science (AIMS) and other marine research bodies. The Authority made a submission to the Senate Standing Committee on Science and the Environment during the year, detailing its research policies and programs.

The need to accelerate research in the Great Barrier Reef Region was highlighted in a report to Federal Parliament at the beginning of the year by the Australian Science and Technology Council (ASTEC). It said that research projects and programs concerned with the understanding and preservation of the Great Barrier Reef should be given a high priority because of the Reef's scientific importance; its fragility in respect of human impact; and because of community concern.

As a result, the Commonwealth agreed to a special financial allocation of \$400,000 for marine research during 1979/80, of which \$300,000 was specifically for additional Great Barrier Reef research. Following recommendations by the Australian Marine Sciences and Technologies Advisory Committee—Funding Advisory Panel (AMSTAC-FAP), grants under this allocation were announced by the Minister for Science and the Environment, the Hon. David Thomson MC in March, 1980, for 15 research projects connected with the Great Barrier Reef.

This special funding program through AMSTAC-FAP as well as the research activities of the Australian Institute of Marine Science (AIMS), provided the opportunity for the Authority to reappraise its own research priorities which previously had included projects of longer-term importance to marine park development, aimed at increasing overall understanding of the functioning of the Great Barrier Reef eco-system. The Authority decided that because a considerable proportion of this research could now be seen to fall within the terms of reference of AMSTAC-FAP much of its own research effort could be directed towards the immediate priorities of Marine Park declaration and zoning.

It agreed that a 'research needs and information requirements' list should be developed in consultation with AMSTAC, AIMS and other bodies with responsibilities for research in the Great Barrier Reef Region. This would be a basis for determining priorities for research relevant to the Great Barrier Reef Marine Park.

Major Survey

The priorities of the Research and Planning Section of the Authority during the year were connected with the declaration and the development of a zoning plan for the Capricornia Section and investigation of a proposed second section off Cairns.

In connection with the Cairns investigation the Authority conducted a major survey of reefs between Innisfail and Lizard Island. The survey commenced on 12 March and continued until 29 May, during which 61 reefs, islands and shoals were examined.

SCUBA dives were undertaken by the research team for a variety of purposes including data recording, specimen collection, coral trout populations survey and photography. New training programs and data sheets were introduced to improve the collection and recording of coral community information. A field identification manual for corals was produced, based on a series of photographs of coral types. It has proved to be effective in other coral research programs and copies have been acquired by the Bureau of Mineral Resources for use in a program of research into the formation of coral sand and rubble.

The main studies were made using the manta-board technique. Under this technique, researchers are towed across reefs behind a motorised dinghy at low speed, diving to record coral growth and conditions using a small, hand-held manta board attached to the tow rope to control depth and angle of dive. There were almost 600 individual tows using this method, covering a total of approximately 600 kilometres of reef edge. The types, condition and size of corals and reefs were recorded for later computer analysis. The team also recorded the presence of crown of thorns starfish, and collected 230 specimens for size measurement, sexing and determining other population characteristics.

Crown of Thorns Investigations

Following reports in December of renewed occurrence of large numbers of crown of thorns starfish on Green Island Reef, the Authority and the Queensland Fisheries Service developed a joint program of survey and research. A special allocation of \$10,000 was made jointly by the Commonwealth and Queensland for this program. It involved:

- survey of Green Island Reef to assess population numbers and distribution;
- study of the effectiveness of hand collection and injection as means of controlling profuse numbers on Green Island Reef;
- survey of other reefs in the area to determine the extent of distribution of large populations of crown of thorns starfish.



A laboratory examination of crown of thorns starfish removed from the Great Barrier Reef.

Large populations of crown of thorns starfish were located at reefs adjacent to Green Island. Both hand collection and injection were found to be effective but slow methods of killing crown of thorns starfish. While appropriate to protecting small reefs of special scientific or commercial importance, they did not offer a means of overall control of large populations of crown of thorns.

Advisory Committee

In view of its management role, the Authority decided to seek expert advice on the crown of thorns starfish phenomenon.

The Authority arranged for an 'ad hoc' committee to be established to advise on a comprehensive program of research into the crown of thorns starfish. The Committee, comprising scientists involved in crown of thorns research in the last decade and people with policy-making responsibilities in Reef research, was chaired by Professor K. J. C. Back, Vice-Chancellor of the James Cook University of North Queensland.

The Committee's broad terms of reference were:

- 1. to review the results of previous research into crown of thorns starfish;
- 2. to develop a program of future research.

The Committee met twice, in April and May 1980, and its report will be considered soon.

Recreational Fishing Research

With the co-operation and assistance of various agencies such as the Queensland Fisheries Service, research institutions, fishing clubs and organisations, the Authority completed a major investigation of recreational fishing within the Great Barrier Reef Region during 1979/80.

This involved evaluating the fish populations in both fished and protected areas using diving survey techniques; analysing the catch records kept by deep sea fishing clubs; and conducting surveys at boat ramps which are launching points to the Great Barrier Reef.

Boat Ramp Surveys

Surveys were conducted at five boat ramps providing access to the Capricorn-Bunker area over a period of three weeks to secure fishing information on a voluntary basis from recreational fishermen. Those surveyed were willing to co-operate and the survey was assisted by fishing clubs and will continue in consultation with the Queensland Fisheries Service at other locations during 1980/81.

Satellite Monitoring

The Authority co-operated with an AMSTAC funded project being conducted by CSIRO to assess the potential of satellite imagery for gathering information about and monitoring the Great Barrier Reef.

Comparison of satellite images with infield reflectance patterns, and aerial and underwater photographs demonstrates that it is possible to distinguish reef zones in the satellite image.

A report is to be compiled on the feasibility of using LANDSAT to monitor reef changes. This report will compare the cost effectiveness of satellite image techniques with low-level aerial photography and field surveys.

Tourism Research

Tourism is one of the most important user industries of the Great Barrier Reef Region and the Authority besides improving its liaison with the tourist industry initiated tourism research and industry assistance projects during the year. Three research consultancies were developed. These were:

- a Reef tourism data base review from 1946 to the present day to document and analyse the development of the tourist industry servicing the Great Barrier Reef Region;
- an attitudinal and socio-economic assessment survey to assess the aspects of a Great Barrier Reef holiday which are most attractive and important to the tourist as compared with the coast and hinterland. The

study will involve holiday makers at a selection of coastal island resorts and the mainland;

research and planning for the extension of information facilities on the Great Barrier Reef. This project will consider the possibilities of providing attractive educational material for tourists visiting the Great Barrier Reef.

Map Production

The Authority has co-ordinated the production of maps for both 'in house' and public usage. The most significant supplier of base maps for the Authority is the Division of National Mapping (DNM) of the Commonwealth Department of National Development and Energy. The DNM's metric scales 1:250,000, 1:500,000 and 1:1,000,000 have been adopted for the Authority's maps. The DNM, as well as locally based drafting firms engaged on contract, produced the following maps for the Authority:

GBR Region, Australia: scale 1:500,000 (coloured)

- GBR Region Australia: scale 1:500,000 (B & W)
- □ GBR Region Australia: scale 1:1,000,000 (B & W)
- □ Great Barrier Reef Marine Park— Capricornia Section scale 1:1,000,000 (B & W)
- Draft Zoning Plan: Capricornia Section scale 1:1,000,000 (coloured)
- □ GBR Region 14° to 18°15' South (2 sheets) scale 1:1,000,000 (B & W)

Augmentative Research Programs

Under the Augmentative Support Program, the Authority assists the financing of research work being carried out in connection with the Great Barrier Reef by graduate students, postgraduates and other research scientists. Applicants are required to be receiving basic expenses from their own organisations and have access to general equipment, library, laboratory and computing facilities necessary for the research.



During 1979/80, the Authority developed its liaison with the tourist industry. A meeting with representatives of the industry was attended by the Minister for Science and the Environment, the Hon. David Thomson, and the Queensland Minister for Maritime Services and Tourism, the Hon. Max Hooper.

As a result of replies to a national advertisement placed by the Authority in February seeking applications, eleven participants in the program for 1979/80 were chosen and grants totalling \$6,263 were made. Details in Appendix B.

Permanent Reef Facilities

Proposals for permanent facilities on the Great Barrier Reef to aid boating enthusiasts and other visitors were being investigated with Authority involvement during the year.

One idea is for the establishment of permanent mooring sites at various heavily-used locations of the Reef, to be used by all types of watercraft. These sites would minimise the threat of damage to corals by boats anchoring individually on the Reef and also be an additional safety aid in bad weather. The Authority decided to organise a national competition among engineering students with a \$1,000 first prize for a suitable mooring design.

The second proposal, from the Queensland Tourist and Travel Corporation, suggested an economic feasibility study relating to the establishment of permanent Reef platforms which could be used for tourism and Reef research. The Authority agreed to financially assist this feasibility study.



Boat ramp surveys were conducted by Authority staff to obtain information on recreational fishing.

7 INFORMATION AND EDUCATION

The Authority decided that positive measures should be pursued to fill some of the information gaps concerning the Great Barrier Reef in the interests of creating more aware and value-conscious users, and assisting people to get the fullest satisfaction from a visit or holiday within the Reef Region.

The Authority further resolved that it should assist the training of staff of resorts and other travel operations which convey information about the Great Barrier Reef to the public.

Information and public education activities expanded during the year to include public meetings and conferences; talks to schools, clubs and organisations; presentation of audio-visuals and displays; establishment of public information centres; and distribution of leaflets, posters and other publications.

The fact that the Great Barrier Reef Marine Park became a reality during the year heightened public interest both within Australia and overseas. The Authority responded to more than 500 individual written requests for information about the park concept and the Great Barrier Reef.

Curriculum Materials Project

By far the largest number of requests for information from the Authority comes from schools and their students. During 1978, officers of the Great Barrier Reef Marine Park Authority held discussions with the academic staff of the Townsville College of Advanced Education to discuss ways of developing school curriculum materials to assist studies of the Great Barrier Reef.

These discussions resulted in a contract between the Authority and the College for the development of a pilot project which was completed in December 1979.

Five kits aimed specifically at the upperprimary level were produced under the title 'Encounters with the Great Barrier Reef'. The kits contained slides, tapes, photographs, a teaching strategy leaflet, and a student activity leaflet. Kit No. 5 is based on an educational board game.

Further development

A contract was signed on 13 June, 1980 between the College and the Authority for a further year's work on the project. This will involve trialling and refining the five kits already produced and the production of two or three more kits. It is hoped that a number of schools, particularly where Reef studies are already carried out, will assist assessment of the materials. The Authority intends to liaise on these matters with State Departments of Education.

Information for Tourists

The House of Representatives Select Committee on Tourism recommended in 1978 that sufficient funds should be made available to the Authority for the development of reef visitor information facilities at major destination areas adjacent to the Great Barrier Reef.

In the 1979 Federal Budget, an appropriation of \$50,000 was made through the Minister for Industry and Commerce, the Rt. Hon. Phillip Lynch for the initial research and development of these facilities. The Authority is administering the project with a pilot program proposed for the Whitsunday area which supports a large and diverse tourist industry.

Specific Assistance

The Authority was approached by the Townsville Tourist Organisation to provide specific assistance to its members in the development of information services relating to the Great Barrier Reef.

Material was provided to two individual tourist operators, including an in-flight commentary for a Barrier Reef excursion air service.

It is recognised by the Authority that some individual tourist operators do not



Displays were mounted at 16 centres throughout the Commonwealth following the release of the draft zoning plan for the Capricornia Section.

have the resources to develop their own information services for visitors. The Authority has accepted a role in this area and intends to provide as much support as possible to private operators who seek assistance.

Information Material

The Authority produced five new leaflets during 1979/80. They were:

- 'The Great Barrier Reef Marine Park Authority', explaining the functions of the Ministerial Council and the Authority;
- 'Challenge of the Great Barrier Reef— Creating a Marine Park' on the zoning of the Capricornia Section;
- 'The Great Barrier Reef Region';
- 'The Coral Polyp—Architect of the Great Barrier Reef';
- ☐ 'Visiting the Great Barrier Reef'.

The latter three leaflets provided general information of particular interest to students and visitors to the Great Barrier Reef.

Free copies were supplied on request to a large number of tourist resorts and tourism organisations.

Posters

Five full-colour posters were produced by the Authority for free distribution for educational purposes, and for sale through tourist organisations.

The posters proved extremely popular within many community areas. Free sets were sent to primary schools in Queensland to assist studies in connection with the Great Barrier Reef.

Newsletter

Two editions of the Authority's newsletter 'Reeflections' were produced on an expanded mailing list to individuals and organisations with an interest in Great Barrier Reef matters. The newsletter provides general information relating to the Great Barrier Reef and the development of the Marine Park.

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Displays

The purchase during the year of a set of demountable static display units provided the opportunity for the Authority to undertake exhibits at a greater number of locations than had been possible in the past.

Most were connected with the public participation programs for the Capricornia Section and the proposed section off Cairns. The Authority also mounted a major display at the Second World Wilderness Congress in Cairns.

Audio and Other Visuals

The Authority produced two new slide/cassette audio-visual programs during the year. One titled 'The Great Barrier Reef Marine Park Concept' was produced with the assistance of Flim Australia in two versions—13 minutes for twin-carousel projection and 11 minutes for single carousel projection.

The second program 'Zoning the Great Barrier Reef Marine Park—Capricornia Section' was produced 'in-house'. The programs were seen by many hundreds of people during the Capricornia and Cairns public participation programs and at other venues.

ABC—**TV** Production

The Authority granted \$20,000 to assist the production of a television documentary on the Great Barrier Reef by the Australian Broadcasting Commission's Natural History Unit.

Filming for the program was carried out at Lizard Island and at reefs off Cairns.

REEF FACTS

The Great Barrier Reef is the largest chain of coral reefs in the world, extending 2,000 kilometres along the Queensland coastline from Cape York to north of Bundaberg. There are approximately 2,500 individual reefs, with more than 350 differing varieties of coral and 1,500 species of fish.

The reefs as they are today are the result of 10,000 to 15,000 years of coral growth on the subsided continental shelf. Within the Great Barrier Reef Region, the width of the continental shelf ranges from its narrowest, about 24 kilometres in the north, to more than 250 kilometres in the south. The distance of reefs from the mainland as a result also varies considerably. Reefs vary in size and shape and many are exposed at low tide.

There are more than 70 coral islands (cays) on the Great Barrier Reef. Heron and Green Islands are coral cays with permanent tourist resorts; other resorts are on continental or high islands which are not part of the Great Barrier Reef.

The Great Barrier Reef Region is of world significance as a turtle breeding area, and many cays are nesting sites for migratory and other birds.

8 ADMINISTRATION

The increase in the Authority's activities as a result of the declaration and zoning of the Capricornia Section required additional administrative support.

The services provided were significantly improved by the acquisition of a word processing system which was used mainly for document preparation, text editing, and mailing list operations.

Progress was made during the year in the establishment of internal administrative systems and procedures, but formal documentation lagged because of insufficient resources. It is expected that this situation will be remedied during 1980/81, due to approved increases in staff numbers.

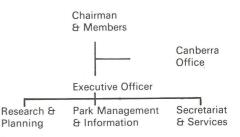
Accounting services provided to the Authority by the Department of Science and the Environment and the Department of Finance, Canberra, ceased on 30 June 1980. In lieu, the Authority is to utilise a local accounting service bureau. Payroll processing services continue to be provided by the Bureau of Meteorology, Brisbane and the Department of Finance, Brisbane.

Staffing

Although restraint on Public Service growth continued during 1979/80, increases in staff were approved to allow the Authority to meet the demands generated largely by the declaration and zoning of the Capricornia Section.

The original staff ceiling of 18 set for 1979/80 was raised to 29 and Public Service Board approval was subsequently obtained for a revised establishment structure of 31 positions, mainly in the information and services areas of the Authority's principal office in Townsville.

The establishment structure provided for three sections in the main office in Townsville and for a small Canberra office as detailed below:



Section	Permanent	Temporary	/	Secondment	Trainees	Total
		Full Pa	art-time			
Executive Research and	2	_				2
Planning Park	4		1	1	1	7
Management and Information Secretariat	6				1	7
and Services	8	3	2	1	1	15
Townsville Canberra	20 2	3	3	2 3	3	31 5
TOTAL	22	3	3	5	3	36

Permanent staffing was supplemented as far as possible by the appointment of temporary and part-time staff; by the secondment of officers from other Departments and agencies; and by participation in training schemes such as the Special Youth Employment Training Program. Staff of the Authority at 30 June 1980 is shown opposite.

SENIOR STAFF

Senior staff positions of the Great Barrier Reef Marine Park Authority were reviewed and appointments made during 1979/80.

Dr Alistair Gilmour was appointed Executive Officer. He joins the Authority from the Victorian Ministry for Conservation where he was Director of the Marine Studies. Dr Gilmour has extensive experience in marine research for management of marine resources. He is a Fellow of the Australian Academy of Technological Sciences and he serves on a number of Commonwealth-State committees concerned with environment protection and conservation.

Mr Rod Williams became Assistant Executive Officer, Park Management and Information; Mr Richard Kenchington, Assistant Executive Officer, Research and Planning; Mr Simon Woodley, Acting Assistant Executive Officer, Secretariat and Services.

Accommodation

Due to staff increases approved during 1979/80, space available at the Authority's offices in Denham St., Townsville, became inadequate, and alternative accommodation was sought.

accommodation was sought.

Approaches were made to the Department of Administrative Services for the securing of an alternative building that would meet the Authority's immediate and long-term space needs as well as retain its requirements for public identification and accessibility. This had not been resolved at the end of the year and had become an urgent matter, particularly in view of further staff increases being projected for 1980/81.

The Authority is very conscious of its responsibility to involve the public to the maximum practicable extent in the development and management of the Marine Park. It believes that its offices should be easily identifiable and should be located centrally in Townsville so that public access is encouraged and facilitated.

Finance

In the 1979/80 Budget, Parliament appropriated \$950,000 for the Authority's on-going activities. Further funds totalling \$69,692 for commitments carried forward from 1978/79 were also available.

However, no provision had been made for declaring and zoning the Capricornia Section, pending consideration by the Great Barrier Reef Ministerial Council.

Following declaration, a further \$250,000 was appropriated for this purpose, mainly to cover expected increases in staffing and information services expenditure.

Total available funds for 1979/80 therefore totalled \$1,269,692.

A small amount of revenue was raised by the Authority for the first time, mainly through sales of posters and T-shirts. An increase in sales of these and other information materials is expected in 1980/81.

Details of expenditure are shown at Appendix C.

9 GREAT BARRIER REEF CONSULTATIVE COMMITTEE

The Great Barrier Reef Consultative Committee was established under the *Great Barrier Reef Marine Park Act* 1975. Its functions are to advise the Commonwealth Minister for Science and the Environment on matters relating to the operation of the Act and, on request, advise the Authority on Marine Park matters.

The initial period of membership for the Committee expired on 21 September 1979 and a new Committee comprising 15 members was appointed on 4 October 1979. The Committee represents a wide cross-section of interests in the Great Barrier Reef, including tourism, fishing, science and conservation. Of the 15 members, seven were nominated by the Commonwealth and seven by the Queensland Government. The 15th member is the Authority Chairman, Mr Kelleher.

Members

Professor K. P. Stark (Chairman)	James Cook University of North Queensland
Mr J. D. Ballingall	Queensland Commercial Fishermen's State Council
Dr J. S. Bunt	Australian Institute of Marine Science
Dr D. W. Connell	Australian Conservation Foundation

Mr P. B. Eccles	Commonwealth Department of Transport
Mr D. J. Fraser	Commonwealth Department of Industry and Commerce
Mr E. J. Hegerl	Queensland Conservation Council and Australian Littoral Society
Mr J. H. Izatt	Queensland Game Fishing Association
Mr G. G. Kelleher	Great Barrier Reef Marine Park Authority
Mr G. McKauge	Reef Region Tourism Task Force
Dr P. Mather	Great Barrier Reef Committee
Dr P. Saenger	Queensland Amateur Fishing Council
Dr G. W. Saunders	Queensland National Parks and Wildlife Service
Mr K. Thompson	Commonwealth Department of Science and the Environment
Mr J. T. Woods	Queensland Department of Mines

Appointments for all members except Dr Bunt expire on 4 October 1982. Dr Bunt's appointment expires on 11 September 1981.

Issues Considered

During 1979/80, the Minister for Science and the Environment referred the following matters to the Committee:

- (a) the contribution of the Committee to the establishment of the Great Barrier Reef Marine Park;
- (b) the use of consultants by the Authority for on-going activities such as zoning strategies and plans of management.
- (c) the size and location of zones and regulation of activities within the Capricornia Section.
- (d) possible boundaries for a Marine Park section adjacent to Cairns between Innisfail and Cooktown and the development of a zoning strategy for it.

In addition the Authority sought and received advice from members both formally and informally on other matters including:

- (a) public participation programs
- (b) Special Zones
- (c) the Zoning Strategy Study and Zoning Plan for the Capricornia Section
- (d) Research into crown of thorns starfish
- (e) Information dissemination

Administrative and secretarial support for the Committee was provided by staff of the Authority. The Committee met four times during 1979/80.



The Chairman of the Great Barrier Reef Consultative Committee, Professor K. P. Stark.

10 THE FUTURE

The Authority faces the future confident of achieving its objectives of protecting the Great Barrier Reef while allowing the maximum reasonable human usage.

The essential ingredient of its responsibilities is efficient resource management that ensures compatibility between each human activity and the conservation of the Great Barrier Reef.

The Authority is people-oriented, with its decision-making largely based upon the views and needs of users and potential users of the Great Barrier Reef. Equally, it needs to continue to gather information from scientific and other research sources to support its declaration and zoning recommendations.

The channels of consultation and cooperation between the Commonwealth and Queensland are firmly established through the Ministerial Council. It was this mechanism that allowed so much to be achieved in 1979/80.

The Authority will continue to undertake its operations in collaboration with Queensland agencies, and with support for developing activities important to the Reef such as those of the Queensland tourist industry. The entire Great Barrier Reef Region as defined in the *Great Barrier Reef Marine Park Act* is subject to the Act including those areas which are part of the offshore constitutional settlement between the Commonwealth and Queensland. The declaration and zoning of parts of the Marine Park within the Region will be subject to the widest possible input from the community and the continuation of public participation programs as already introduced for Capricornia and Cairns.

Public reaction to the first zoning plan for the Capricornia Section indicates that the Authority's approach is generally acceptable. While it is not possible to please everyone in a zoning plan, every effort will continue to be made to find an acceptable balance between conservation and the needs for commercial, recreational and scientific activities. The future of all these interests is dependent on the Great Barrier Reef surviving as a self-renewing system. That is what the Great Barrier Reef Marine Park Authority is working to ensure.

APPENDICES

APPENDIX A.

Research and Studies Funded by the Great Barrier Reef Marine Park Authority 1979/80

Proj	ect	Researcher	Objective
1.	Curriculum Materials Project	Mr B. Armour (Towns- ville College of Advanced Education)	To produce education resource material on the Great Barrier Reef for general use by upper-primary school students and teachers.
2.	Green Island Economics Study	Mr R. O'Hara, Mr M. Gibbings (Cameron, McNamara & Partners Ltd.)	To evaluate the existing and alternative uses of Green Island and its reef as a tourist/recreational resource.
3.	Benthos (coral baseline) Survey of reefs in the proposed	Great Barrier Reef Marine Park Authority	A survey of coral communities to assess their distribution within the proposed second section of the Marine Park.
	second section of the Marine Park		
4.	Coral Trout Surveys in Capricornia	Great Barrier Reef Marine Park Authority	Refinements of diving survey technique and conduct of surveys at Capricorn and Bunker reefs to determine state of coral trout populations.
5.	Boat Ramp Surveys in Capricornia	Great Barrier Reef Marine Park Authority	Surveys at boat ramps adjacent to the Capricornia Section to determine catch, effort and economic information about Reef fishing by people using their own boats.
6.	Zoning Strategy Study	Ms D. Anderson and Mr D. Pitts, (Environment Sciences and Services)	Prepare zoning strategies for the Capricornia Section including: —inventory of existing data, usage impacts and constraints, development of, and comparisons between, alternative strategies.
7.	Economic Analysis of Commercial and Recreational Fishing in Capricornia	Dr G. McDonald (Griffith University)	Accurately identify the economic value of the fishery in the Capricornia area of the Great Barrier Reef Region, using information on monetary value of Reef fish catches, fishing effects, investment and cost structure.
8.	Benthos (coral baseline) Survey of Capricornia	Great Barrier Reef Marine Park Authority	Completion of a survey of coral communities to assess their distribution within the Capricornia Section.

9.	Analysis of Coral Baseline Data	Dr T. Done, (James Cook University)	Refine existing programs and methods for producing computer maps and produce maps collating the available coral baseline survey data.
10.	Refinement of Coral Baseline Methodology	Dr T. Done, (James Cook University)	Refine coral baseline and monitoring methodologies, analyse coral survey data and develop a classification of major reef community types.
11.	Amateur Fishing Study	Great Barrier Reef Marine Park Authority	Assess, through the analysis of amateur fishing club catch records, the population fluctuations of reef fish stocks and the possible impact of fishing on these stocks.
12.	Geomorpho- logical Study of Capricorn and Bunker Reefs	Dr P. Davies, Bureau of Mineral Resources	Develop a classification of reefs, according to their age, which would be of use in reef management.
13.	Evaluation of LANDSAT	Great Barrier Reef Marine Park Authority & C.S.I.R.O.	Assess use of LANDSAT imagery, facilitate large scale surveys of coral growth and monitor the condition of reefs.
14.	Ground Truth Evaluation	Ms D. Kuchler, (James Cook University)	Investigate the usefulness of LANDSAT imagery and aerial photography as remote sensing methods for small scale survey of coral reef communities.
15.	Engineering Properties of Coral Reef Platforms	Dr H. Bock, (James Cook University)	A preparatory study towards the probable construction of artificial platforms on exposed reefs for use as research out-posts, navigational aids and tourist facilities.
16.		Great Barrier Reef Committee	Provide scientifically based reports on the physical and biological resources of three areas of the Great Barrier Reef: —between Lizard Island and Innisfail; —off Townsville; —the Swain Reefs; and identify current and appropriate usage of these areas.
17.	Reef Region Data Base Review— 1946-1980	Australian Travel Industry Association, Brisbane	Review and analyse the growth or decline of the tourism industry sector servicing the Great Barrier Reef Region.
18.	Research and Planning of Information Facilities on the Great Barrier Reef	Cameron, McNamara & Partners Ltd.	Assess the type of programs and facilities required in the Great Barrier Reef Region using the Whitsunday area as an example; and the role which various public and private organisations should play in an integrated information/education facility.

APPENDIX B

Augmentative Research Support Program

Title	investigator	Institution	Amount
Distribution of larval fishes at Lizard Island.	Dr J. Leis	Australian Museum	\$600
Coral Trout populations in Tahiti in fished and unfished areas.	Mr J. Bell	N.S.W. State Fisheries	\$558
Coral Cay Vegetation analysis in Capricorn and Bunker Groups.	Ms P. Sales	University of Queensland	\$610
Utilisation of LANDSAT and aerial photography for coral reef research.	Ms D. Kuchler	James Cook University	\$476
Enzyme analysis in representative corals.	Dr M. Streamer	James Cook University	\$354
Evaluation of 10 aboriginal sites on South Keppel.	Mr M. Rowland	University of QLD	\$440
Space related behaviour and ecology of chaetodontid fishes.	Mr M. Sutton	University of Sydney	\$652
Relation between rates of recruitment and availability of potential recruits in the plankton.	Ms P. Schmitt	University of Sydney	\$852
The survivorship of recruits and the effects of this in adult and other juvenile fishes.	Mr B. Sharp	University of Sydney	\$652
Attitudes of Townsville and Cairns inhabitants to the Great Barrier Reef.	Mr F. Greenleaf	James Cook University	\$269
Coral Trout species identification.	Dr D. Hoese	Australian Museum	\$500

APPENDIX C

Financial Statements

GREAT BARRIER REEF MARINE PARK AUTHORITY STATEMENT OF RECEIPTS AND PAYMENTS FOR THE PERIOD 1 JULY 1979 TO 30 JUNE 1980

	1979-80	1978-79
Cash at bank and on hand 1 July	\$ 69 692	\$ 48 305
RECEIPTS	00 002	40 000
Appropriation from the Commonwealth Government Sale of promotional material	1 098 819 747	577 795 —
	1 169 258	626 100
PAYMENTS		
Operational		
Chairman and part-time Members—		
remuneration, allowances and expenses (a) Great Barrier Reef Consultative Committee—	62 174	17 576
fees and expenses	11 252	6 910
Salaries and payments in the nature	11 202	0010
of salaries	389 489	220 195
Travel and subsistence	127 821	49 667
Office requisites and stationery	48 306	24 489
Postage, telephone and telegrams	52 683	22 1 30
Office rental and cleaning	36 905	16 817
Library services	4 264	1 309
Publicity and information	57 764	8 772
Research and investigation	116 528	83 322
Other expenses		
—Advertising	23 352	3 724
—Removal expenses	4 670	5 204
—Incidentals	40 663	11 096
—Reimbursement to Departments of	10 000	
Defence and Science and the Environment		
for administrative costs		16 399
	975 871	487 610(b
<i>Capital</i> Furniture and fittings	37 548	8 272
Plant, vehicles and equipment	47 639	60 526
	85 187	68 798
Cash at bank and on hand 30 June	108 200	69 692
	1 169 258	626 100

(a)	This item is a composite of a number of distinct expenditures as follows			
		1979-80	1978-79	
		\$	\$	
	Remuneration & Allowances	40 845	6 006	
	Travel & Subsistence	20 1 5 5	11 570	
	Other Expenses	1 174	-	
		62 174	17 576	

Mr G. G. Kelleher was appointed full-time Chairman from 21 December 1979 after being appointed as fulltime Acting Chairman from 7 July 1979. Remuneration was not paid during 1978-79.

(b) Dissection details of 1978-79 expenditure have been adjusted where necessary, to allow comparison with 1979-80 figures.

	1979-80	1978-79
Plant and motor vehicles Furniture, fittings and office equipment Field equipment Library acquisitions (a)	\$ 12 877 113 293 59 512 —	\$ 5 422 56 098 38 975 2 204
	185 682	102 699

STATEMENT OF CAPITAL ASSETS (AT COST) AS AT 30 JUNE 1980

(a) Library acquisitions are now recorded as operational expenditure and hence no amount is shown for 1979-80.

In our opinion, the above Statement of Receipts and Payments and Statement of Capital Assets (At Cost) have been properly drawn up so as to show fairly the financial transactions of the Great Barrier Reef Marine Park Authority for the year ended 30 June 1980.

GRAEME KELLEHER Chairman

PFFL

ALISTAIR J. GILMOUR Executive Officer

APPENDIX D

Auditor-General's Report

The Honourable the Minister for Science and the Environment Parliament House Canberra, A.C.T. 2600

Dear Sir

GREAT BARRIER REEF MARINE PARK AUTHORITY

In accordance with section 60(2) of the Great Barrier Reef Marine Park Act 1975 the Authority has submitted for my report, financial statements for the year ended 30 June 1980, comprising a Statement of Receipts and Payments and a Statement of Capital Assets (At Cost).

Copies of the Statements, which are in the form approved pursuant to section 60(2) of the Act, are enclosed for your information.

I now report in terms of section 60(2) of the Act that the Statements are in agreement with the accounts and records and in my opinion:

the Statements are based on proper accounts and records; and

the receipt and expenditure of moneys, and the acquisition of assets, by the Authority during the year have been in accordance with the Act, except that, on the basis of the

records subject to audit, expenditure by the Authority exceeded the estimates approved under section 54(2) of the Act.

No assets were disposed of during the year.

Yours faithfully,

O. FENWICK For and on behalf of The Auditor-General

